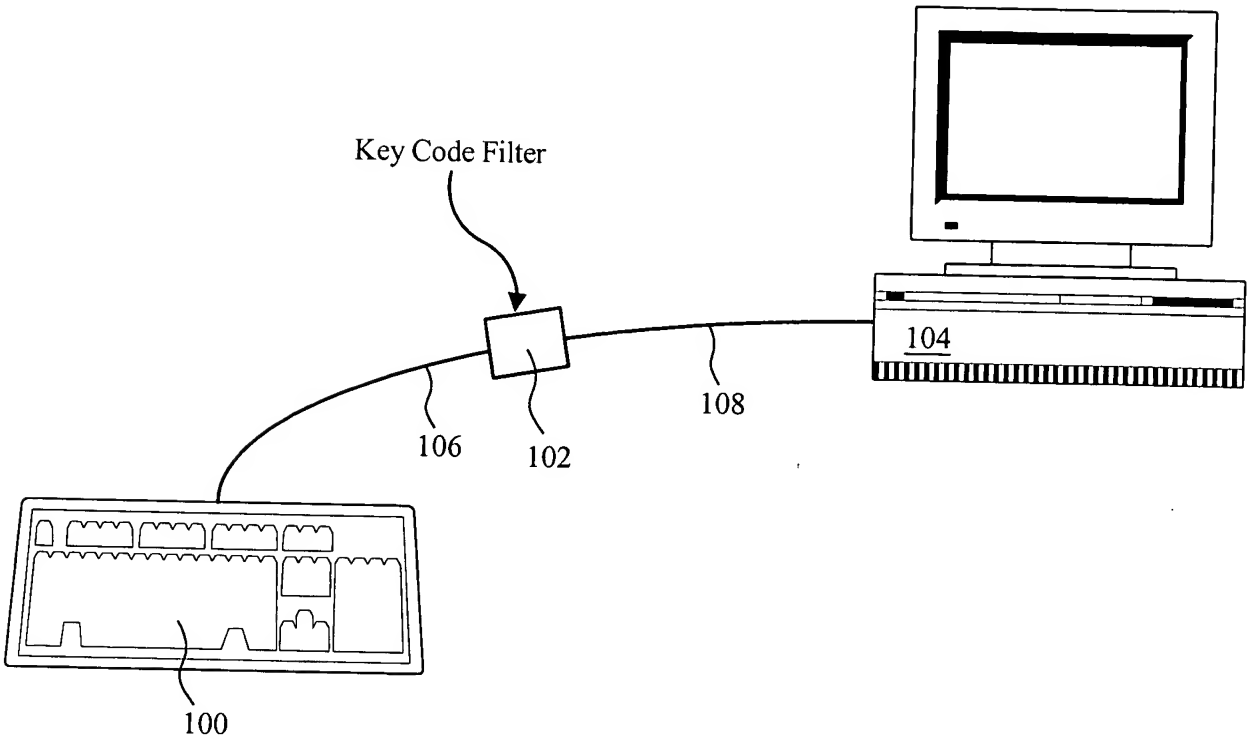
Key Code Filter
104
108
106
102
100

Fig. 1A

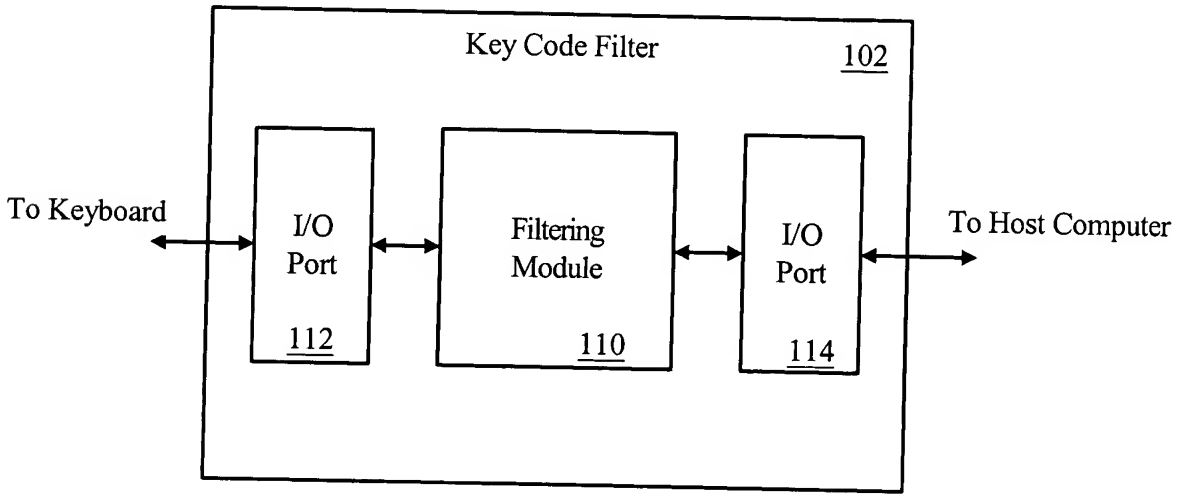
Key Code Filter
102
To Keyboard
I/O Port
112
Filtering Module
110
I/O Port
114
To Host Computer

Fig. 1B

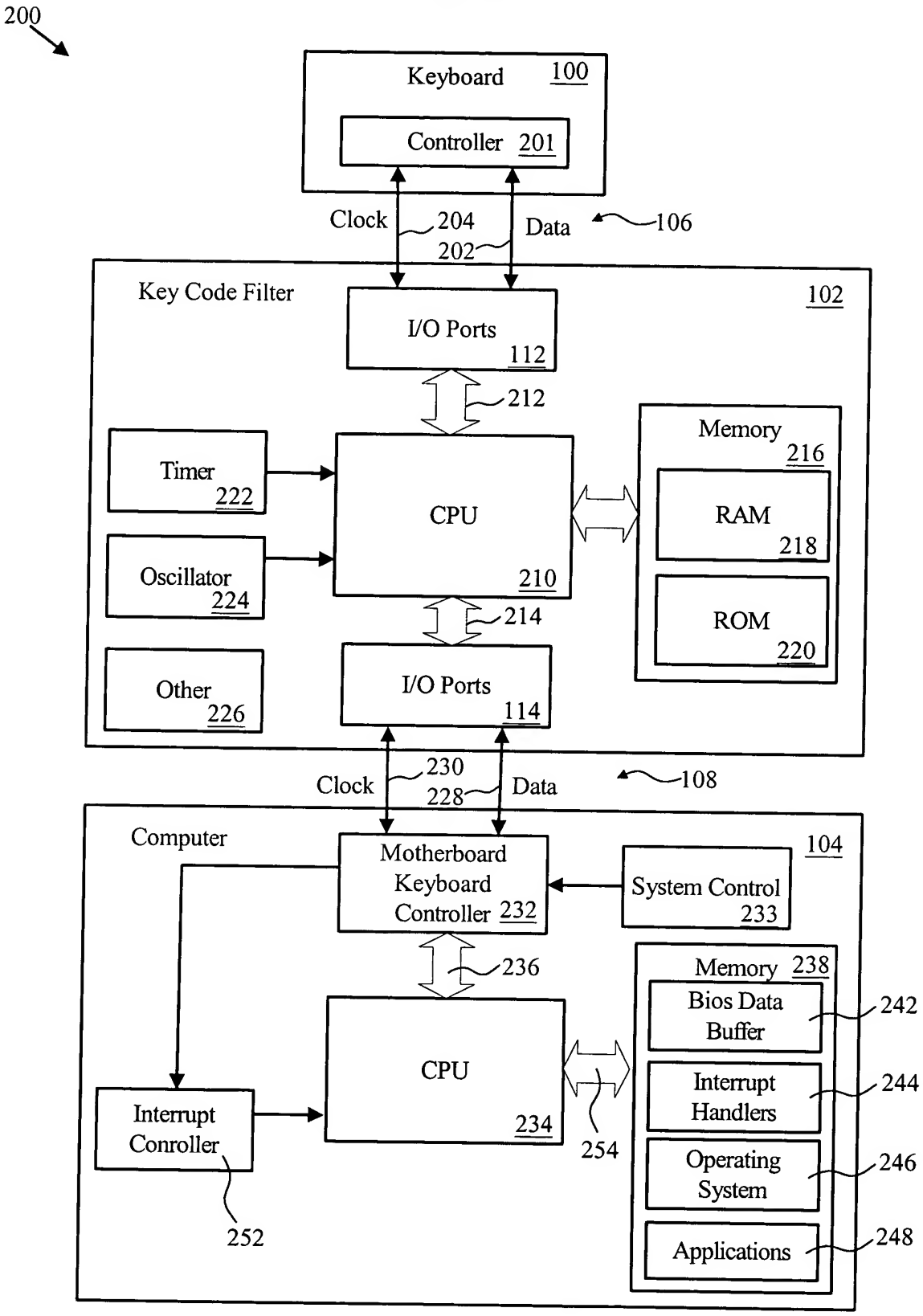
200
Keyboard 100
Controller 201
Clock
204
202
Data
106
Key Code Filter
102
I/O Ports
112
212
Timer
222
Oscillator
224
CPU
210
214
Memory
216
RAM
218
ROM
220
Other
226
I/O Ports
114
Clock
230
228
Data
108
Computer
104
Motherboard
Keyboard
Controller 232
System Control
233
236
Memory 238
Bios Data
Buffer
242
CPU
234
254
Interrupt
Handlers
244
Interrupt
Conroller
Operating
System
246
252
Applications
248

Fig. 2

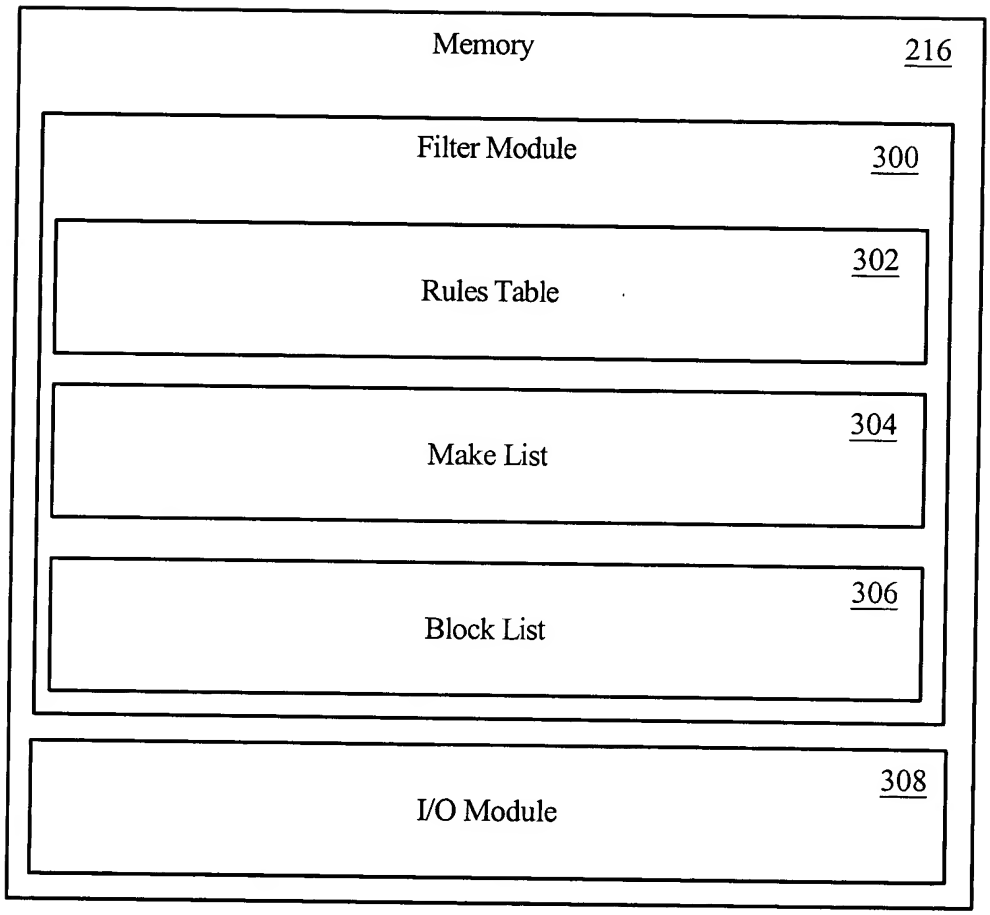
Memory
216
Filter Module
300
302
Rules Table
304
Make List
306
Block List
308
I/O Module

Fig. 3

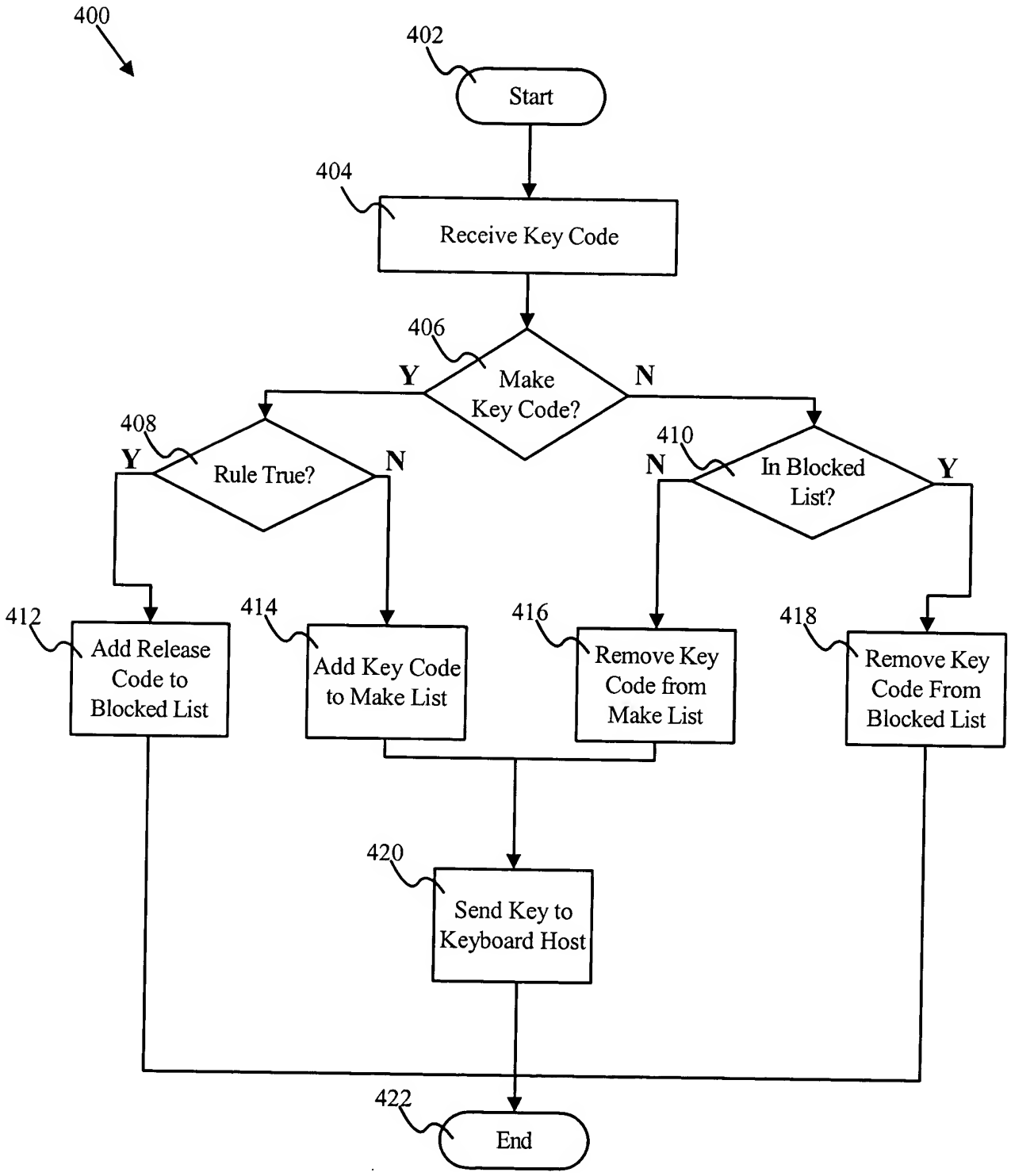
400
402
Start
404
Receive Key Code
406
Make Key Code?
Y
N
408
Rule True?
Y
N
410
In Blocked List?
N
Y
412
Add Release Code to Blocked List
414
Add Key Code to Make List
416
Remove Key Code from Make List
418
Remove Key Code From Blocked List
420
Send Key to Keyboard Host
422
End

Fig. 4

RULES TABLE

	502 Key	504 Key Code	506 Rule
508	Del (press)	0x71	Alt and Ctrl
510	0 (press)	0x45	FALSE
512	c (press)	0x21	(Alt and Ctrl) or Ctrl
514	F1 (press)	0x05	TRUE
516	R-Alt	0xE0, 0x11	FALSE
518	R-Ctrl	0xE0, 0x14	FALSE
520	L-Alt	0x11	FALSE
522	L-Ctrl	0x14	FALSE

Fig. 5

600

	602 Event	604 Make List	606 Block List	608 Keys Sent to Host
610 1	Ctrl_Make	{Ctrl}	{}	Ctrl_Make
612 2	Alt_Make	{Ctrl, Alt}	{}	Alt_Make
614 3	Del_Make	{Ctrl, Alt}	{Del}	
616 4	Del_Break	{Ctrl, Alt}	{}	
618 5	Alt_Break	{Ctrl}	{}	Alt_Break
620 6	Ctrl_Break	{}	{}	Ctrl_Break

650

	602 Event	604 Make List	606 Block List	608 Keys Sent to Host
652 1	F1_Make	{}	{F1}	
654 2	F1_Break	{}	{}	

Fig. 6

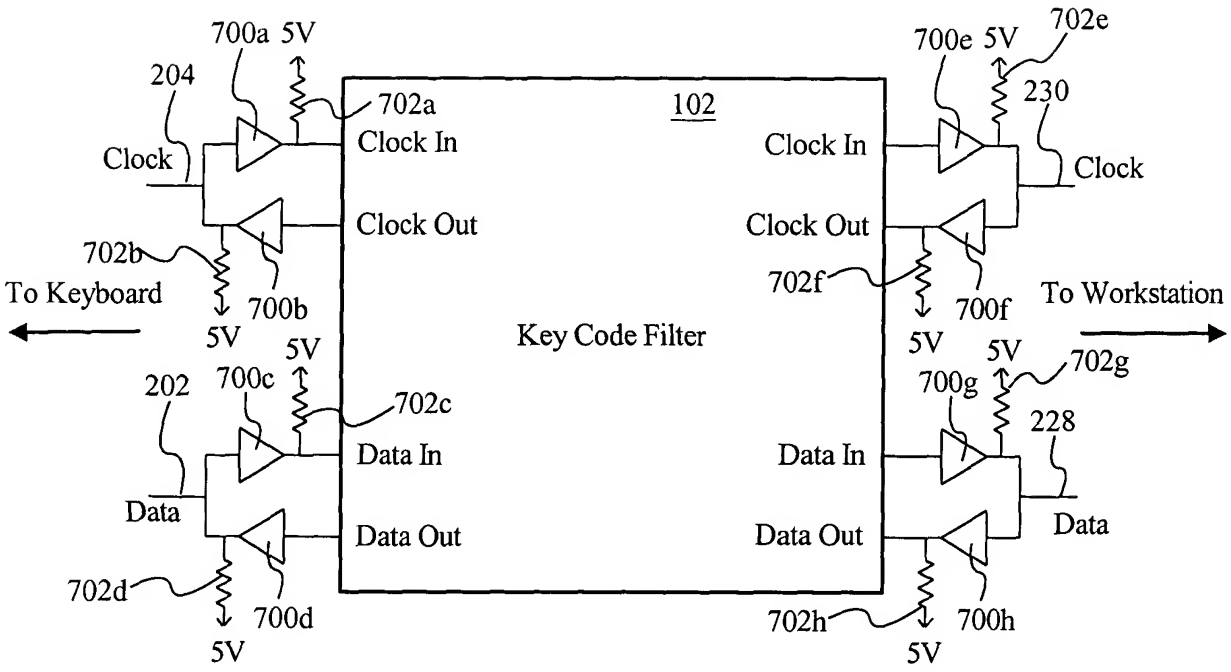
700a
5V
204
702a
Clock
Clock In
102
Clock Out
702b
To Keyboard
700b
5V
5V
202
700c
702c
Data In
Data
Data Out
702d
700d
5V
Key Code Filter
700e
5V
702e
230
Clock In
Clock
Clock Out
702f
700f
5V
To Workstation
5V
700g
702g
228
Data In
Data
Data Out
702h
700h
5V

Fig. 7

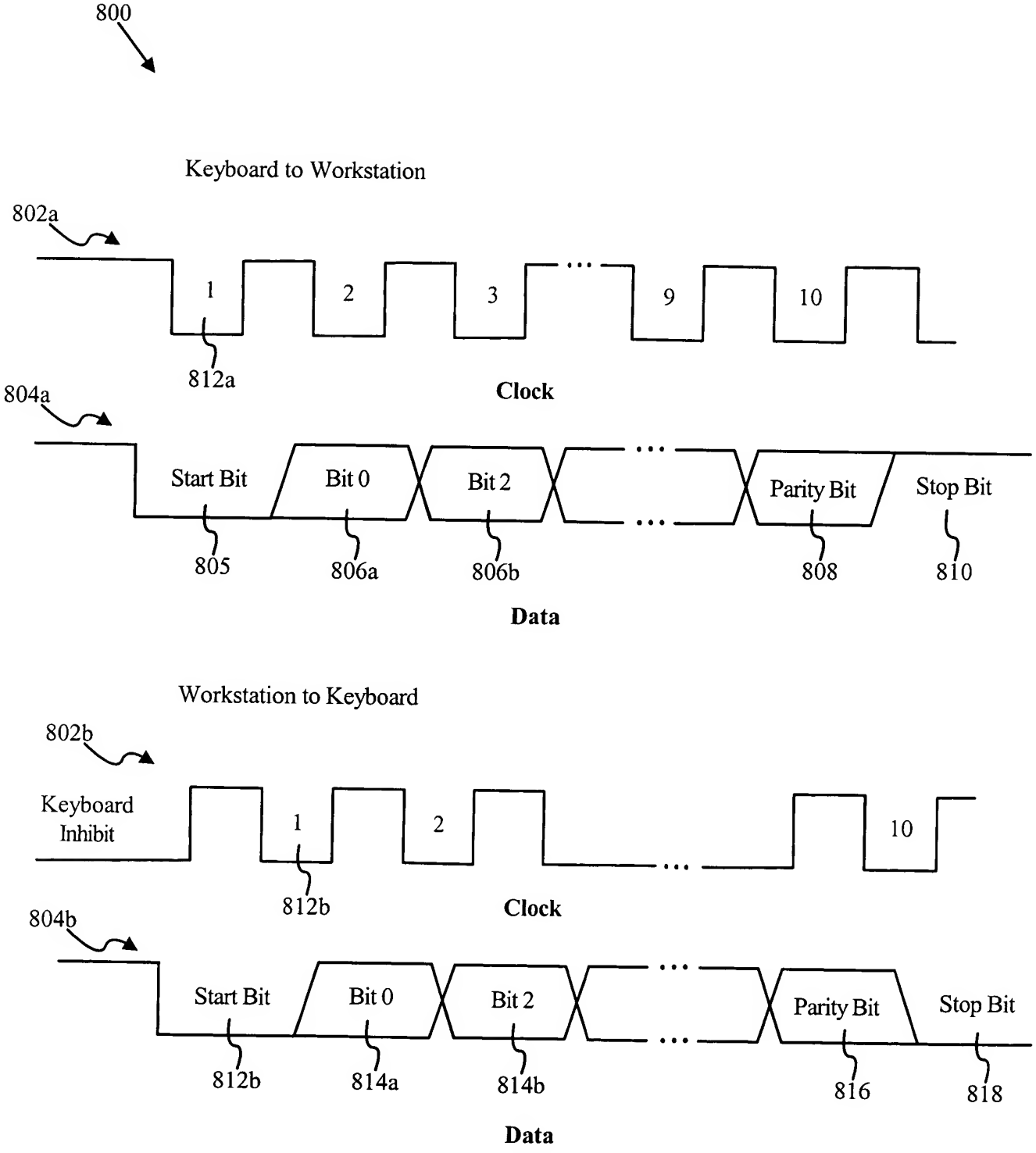
800
Keyboard to Workstation
802a
1
2
3
9
10
812a
Clock
804a
Start Bit
Bit 0
Bit 2
Parity Bit
Stop Bit
805
806a
806b
808
810
Data
Workstation to Keyboard
802b
Keyboard Inhibit
1
2
10
812b
Clock
804b
Start Bit
Bit 0
Bit 2
Parity Bit
Stop Bit
812b
814a
814b
816
818
Data

Fig. 8